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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,384	05/21/2001	Kiyoshi Motegi	P-25.096 USA	7923

7590 08/27/2003

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Philadelphia, PA 19107-2950

EXAMINER

KIM, PETER B

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,384

Applicant(s)

MOTEGI ET AL.

Examiner

Peter B. Kim

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 27-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 52001, 52002, 52003, 52004, 52005, 52006, 52007, 52008, 52009, 52010, 52011, 52012, 52013, 52014, 52015, 52016, 52017, 52018, 52019, 52020, 52021, 52022, 52023, 52024, 52025, 52026, 52027, 52028, 52029, 52030, 52031, 52032, 52033, 52034, 52035, 52036, 52037, 52038, 52039, 52040, 52041, 52042, 52043, 52044, 52045, 52046, 52047, 52048, 52049, 52050, 52051, 52052, 52053, 52054, 52055, 52056, 52057, 52058, 52059, 52060, 52061, 52062, 52063, 52064, 52065, 52066, 52067, 52068, 52069, 52070, 52071, 52072, 52073, 52074, 52075, 52076, 52077, 52078, 52079, 52080, 52081, 52082, 52083, 52084, 52085, 52086, 52087, 52088, 52089, 52090, 52091, 52092, 52093, 52094, 52095, 52096, 52097, 52098, 52099, 52100, 52101, 52102, 52103, 52104, 52105, 52106, 52107, 52108, 52109, 52110, 52111, 52112, 52113, 52114, 52115, 52116, 52117, 52118, 52119, 52120, 52121, 52122, 52123, 52124, 52125, 52126, 52127, 52128, 52129, 52130, 52131, 52132, 52133, 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DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 1-26 in Paper No. 72003 is acknowledged.

Claims 27-37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected groups, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 72003.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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Claims 1-17, and 23-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishi (6,335,787).

Nishi discloses an exposure apparatus comprising an optical apparatus with optical elements of illumination optical system and projection optical system, which projects pattern formed on the mask onto a substrate, in an airtight chamber (Fig. 2 and ref. 111, 113), a light source which emits an excimer laser (2), a first purge mechanism (117) for providing an inert gas or nitrogen and a second purge mechanism (116) for providing oxygen, an operation condition detecting mechanism and a control apparatus for connecting the first or second purge mechanism based on the detection result (col. 25, line 27 – col. 26, line 41). Nishi also discloses cleaning apparatus arranged to remove impurities from the gases (col. 26, lines 1-23). Nishi also disclose an exhaust apparatus connected to the airtight chamber and the operation condition detecting mechanism includes an exhaust monitor provided with the exhaust apparatus to detect the exhaust volume (col. 27, line 61 – col. 28, line 48). It is inherent in Nishi's teaching that the invention of Nishi would include a housing which accommodates the airtight chamber and the operation condition detecting mechanism and a holder that stores the gases supplied to the apparatus.

Claims 1-5, 9, 13, and 14-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Magome et al. (Magome) (2002/0145711).

Magome discloses an exposure apparatus comprising an optical apparatus with optical elements of illumination optical system and projection optical system, which projects pattern formed on the mask onto a substrate, in an airtight chamber (Fig. 1, ref. 7), a light source which emits an excimer laser (3), a first purge mechanism (46, 47) for providing one type of gas and a

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second purge mechanism (84, 85) for providing a second type of gas, an operation condition detecting mechanism (para 0077) and a control apparatus for connecting the first or second purge mechanism based on the detection result (para 0099). Magome also discloses cleaning apparatus arranged to remove impurities from the gases (para 0096). Magome also disclose an exhaust apparatus connected to the airtight chamber and the operation condition detecting mechanism includes an exhaust monitor provided with the exhaust apparatus to detect the exhaust volume (para 0117-0119, and 0141). Magome also teaches holder (84) for holding the second gas.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Kim whose telephone number is (703) 305-0105. The examiner can normally be reached on Monday-Thursday from 8:30 AM to 6:00 PM. The examiner can also be reached on alternate Fridays during the same hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703 308 2847. The fax phone numbers for the organization where this application or proceeding is assigned is 703 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 306- 3431.



Peter B. Kim
Patent Examiner
August 22, 2003